

# TRADE FINANCE DURING THE GREAT TRADE COLLAPSE

Editors

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# OVERVIEW

## Introduction

On September 15, 2008, Lehman Brothers, the fourth-largest U.S. investment bank, filed for bankruptcy, marking the largest bankruptcy in U.S. history and the burst of the U.S. subprime mortgage crisis. Concerns about the soundness of U.S. credit and financial markets led to tightened global credit markets around the world. Spreads skyrocketed. International trade plummeted by double digits, as figure O.1 illustrates. Banks reportedly could not meet customer demand to finance international trade operations, leaving a trade finance “gap” estimated at around \$25 billion. The liquidity problem spread from the United States and the European Union (EU) to developing countries’ markets. As the secondary market dried up in late 2008, the trade finance gap reportedly increased to up to \$300 billion.

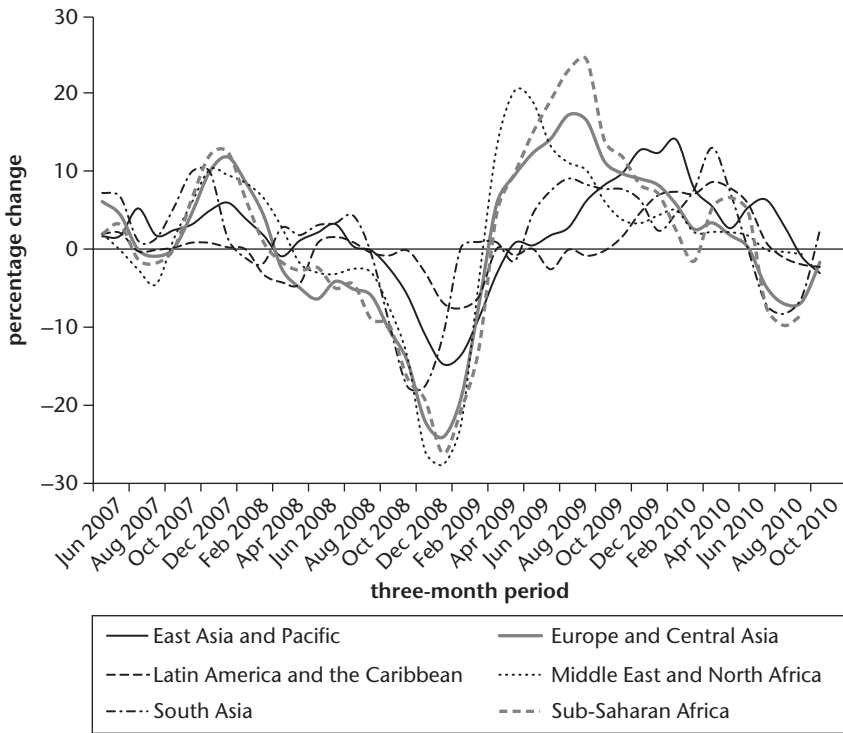
In the midst of the crisis, these alarming developments were at the epicenter of world leaders’ attention. When the G-20 leaders held their first crisis-related summit in Washington, D.C., in November 2008, their primary objective was to reach a common understanding of the root causes of the global crisis and agree on actions to address its immediate effects, including providing liquidity to help unfreeze credit markets.

The purpose of this book is to provide policy makers, analysts, and other interested parties with a comprehensive assessment of the role of trade finance in the 2008–09 “great trade collapse” (Baldwin 2009) and the subsequent role of governments and institutions to help restore trade finance markets.

The 1997–98 Asian crisis had already illustrated the critical role that trade finance plays during a financial crisis—especially its effects on trade—but that crisis remained regionally confined, and international institutions and regulators largely blamed the opaque financial sector in the affected economies for the crisis. In contrast, the 2008–09 crisis originated in the United States, one of the most

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**Figure 0.1.** Trade Fluctuations by Region, 2007–10  
*export volume, three-month moving average (seasonally adjusted)*



Sources: Authors' calculations and data from Datastream.

transparent and sophisticated financial markets, and quickly spilled over to the EU and the rest of the world.

Policy makers, central bankers, and finance ministers from around the world found themselves in largely uncharted territories. They had to contemplate policy actions to channel liquidity into the real economy in support of trade transactions. However, because of the dearth of data on trade finance, they had no gauge to estimate the magnitude of the market gap or even to know whether trade finance was indeed a main factor behind the drop in trade. It was also not clear whether governments' intervention in favor of a specific segment of the financial system—the trade finance market—was justified and warranted.

Trade finance covers a wide spectrum of payment arrangements between importers and exporters—from open accounts to cash-in-advance, interfirm trade credit, and bank-intermediated trade finance. Moreover, assessment of trade finance conditions is notoriously difficult in the absence of organized markets for

bank-intermediated trade finance and given the proprietary nature of bank information about customer relationships. With these considerations in mind, estimation of the effect of a potential trade finance shortfall on the decline in trade volumes during the crisis was even more convoluted. Against this background, the World Bank commissioned firm and bank surveys in developing countries to assess the impact of the financial crisis on trade and trade finance developments. The International Monetary Fund (IMF), in association with the Bankers' Association for Finance and Trade (BAFT)—now merged with International Financial Services Association (BAFT-IFSA)—and others, conducted additional surveys of commercial banks in developed and emerging countries to collect information on commercial bank trade finance conditions.

Governments and international institutions were encouraged to intervene on the basis of information that some 80–90 percent of world trade relies on some form of trade finance and that trade credit markets were tight.<sup>1</sup> To help overturn the trade collapse and a possible further deepening of the global economic recession, the G-20 called on international institutions at its Washington, D.C., summit to provide trade financing to assist developing countries affected by the crisis. At a second summit in London in April 2009, the G-20 adopted a broad package to provide at least \$250 billion in support of trade finance over two years.

This book assembles 23 contributions to tell the story of trade finance during the 2008–09 global economic crisis and to answer four main questions:

1. What do we know about the specifics and determinants of trade finance during financial crises, especially the role of interfirm trade credit versus bank-intermediated trade finance?
2. Was the availability and cost of trade finance a major constraint on trade during the crisis?
3. What are the underpinnings and limits of national and international public interventions in support of trade finance markets in times of crisis?
4. How effective was the institutional support for trade finance put in place during the crisis, and to what extent (if any) did the new banking regulations under Basel II and Basel III exacerbate the trade finance shortfall during the crisis and in the postcrisis environment?

### ***What Is Trade Finance, and Why Does It Matter?***

The global financial crisis demonstrated that trade finance is a broad concept that encompasses various products, mechanisms, and players. When trade collapsed in the fall of 2008, trade finance rapidly became the focus of attention. Foremost, the crisis illuminated the dearth of data and information on trade finance.

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Trade finance differs from other forms of credit (for example, investment finance and working capital) in ways that have important economic consequences during periods of financial crisis. Perhaps its most distinguishing characteristic is that it is offered and obtained not only through third-party financial institutions, but also through interfirm transactions. Table O.1 lists the major trade finance products.

The vast majority of trade finance involves credit extended bilaterally between firms in a supply chain or between different units of individual firms.<sup>2</sup> According to messaging data from the Society for Worldwide Interbank Financial Telecommunication (SWIFT), a large share of trade finance occurs through inter-firm, open-account exchange. Banks also play a central role in facilitating trade, both through the provision of finance and bonding facilities and through the establishment and management of payment mechanisms such as telegraphic transfers and documentary letters of credit (LCs). Among the intermediated trade finance products, the most commonly used for financing transactions are LCs, whereby the importer and exporter entrust the exchange process to their respective banks to mitigate counterparty risk. The IMF/BAFT-IFSA bank surveys during the crisis helped gather information on the market shares of financing products and suggested that about one-third of trade finance is bank intermediated, as figure O.2 shows.

Relative to a standard credit line or working-capital loan, trade finance—whether offered through banks or within the supply chain—is relatively illiquid, which means that it cannot easily be diverted for another purpose. It is also highly collateralized; credit and insurance are provided directly against the sale of specific products or services whose value can, by and large, be calculated and secured.<sup>3</sup> This suggests that the risk of strategic default on trade finance should be relatively low, as should be the scale of loss in the event of default.

**Figure O.2.** Trade Finance Arrangements, by Market Share

|   |  |  |                               |           |
|---|--|--|-------------------------------|-----------|
| cash in advance<br>19%–22%<br>\$3.0 trillion–<br>\$3.5 trillion | bank trade finance<br>35%–40%<br>\$5.5 trillion–<br>\$6.4 trillion | open account<br>38%–45%, \$6.0 trillion–\$7.2 trillion                 |                               |           |
|   |  | credit covered by<br>BU members<br>\$1.25 trillion–<br>\$1.50 trillion | arm’s-length<br>nonguaranteed | intrafirm |

← \$15.9 trillion in global merchandise trade (2008 IMF estimate) →

Sources: IMF staff estimates from IMF/BAFT-IFSA surveys of commercial banks (IMF-BAFT 2009; IMF and BAFT-IFSA 2010) and Berne Union database.

Note: BU = Berne Union. IMF = International Monetary Fund. BAFT-IFSA = Bankers’ Association for Finance and Trade–International Financial Services Association.

**Table O.1.1.** Overview of Trade Finance Products

| Category                            | Product                  | Description  |  |
|-------------------------------------|--------------------------|--|--|
| Interfirm or supply-chain financing | Open account             | <ul style="list-style-type: none"> <li>Contract settled between importer and exporter without third-party security or risk management arrangements, either directly or (most commonly) through transfers between their banks; extension of credit by one party (normally the exporter) by way of accepting payment after a certain delay (usually 30–90 days)</li> </ul>   |  |
|                                     | Investment capital       | <ul style="list-style-type: none"> <li>Medium-term finance for investment in the means of production (for example, machinery)</li> </ul>   |  |
|                                     | Working capital          | <ul style="list-style-type: none"> <li>Short-term finance to cover ongoing costs (addressing mismatch in timing between cash receipts and costs incurred), including payment of suppliers, production, and transport; also used to cover risks of (or real) delays in payments, effects of currency fluctuations, and so on</li> </ul>   |  |
| "Traditional" bank financing        | Preexport finance        | <ul style="list-style-type: none"> <li>Similar to working capital, but bank takes a security interest in the goods being shipped and a right to receive payment for those goods directly from the importer; typically used for commodity production</li> </ul>   |  |
|                                     | Letter of credit (LC)    | <ul style="list-style-type: none"> <li>Provided by importer's bank to exporter's bank; when exporter fulfills LC conditions, the relevant documents of proof submitted to exporter's bank, which submits them to importer's bank, which remits funds to exporter's bank, which then pays exporter (importer subsequently remits funds to importer's bank)</li> <li>Designed to mitigate the counterparty risk inherent in open-account transactions</li> <li>Could be issued under various modalities (for example, confirmed, standby, deferred, revocable, transferable, usance, or back-to-back)</li> </ul> |  |
| Payment mechanisms and liquidity    | Supplier credit          | <ul style="list-style-type: none"> <li>Extended or deferred payment terms offered by the supplier to the buyer but typically linked with bank financing to enable exporter to receive cash on delivery (for example, factoring)</li> </ul>   |  |
|                                     | Buyer credit             | <ul style="list-style-type: none"> <li>Term financing provided to finance cash payments due to supplier</li> </ul>   |  |
|                                     | Countertrade             | <ul style="list-style-type: none"> <li>Addresses liquidity (particularly access to foreign exchange, thus especially relevant in emerging economies) by promoting two-way trade of equivalent-value merchandise (for example, barter, buy-back, or counterpurchase)</li> </ul>   |  |
|                                     | Factoring and forfaiting | Factoring and forfaiting   | <ul style="list-style-type: none"> <li>Factoring as a financial service that purchases an exporter's invoices or accounts receivable at a discount and assumes the risk of nonpayment; addresses both liquidity and risk mitigation</li> </ul> |
|                                     |                          |  | <ul style="list-style-type: none"> <li>Forfaiting similar to factoring but typically involves medium-term accounts receivables for exporters of capital goods or commodities with long credit periods</li> </ul>                               |

(continued next page)

**Table 0.1.** (continued)

| Category                               | Product                    | Description   |
|--|----------------------------|---|
| Risk management                        | Advance payment guarantees | <ul style="list-style-type: none"> <li>• Security provided to importer when exporter requires mobilization payment; usually a matching amount callable on demand</li> </ul>   |
|  | Performance bonds          | <ul style="list-style-type: none"> <li>• Security provided to importer (normally in case of capital goods export); callable if exporter fails to perform (compensates for costs of finance, rebidding, and so on)</li> </ul>                                  |
|  | Refund guarantees          | <ul style="list-style-type: none"> <li>• Security provided to importer when importer is required to make stage payments during manufacturing by exporter (normally in case of large capital-goods export); callable if goods are not delivered</li> </ul>     |
|  | Hedging                    | <ul style="list-style-type: none"> <li>• Security (for example, through a financial instrument issued by a bank) to offset market (rather than counterparty) risks, including fluctuations in exchange rates, interest rates, and commodity prices</li> </ul> |
| Export credit insurance and guarantees | Export credit insurance    | <ul style="list-style-type: none"> <li>• Exporters insured against a range of risks, including nonpayment, exchange rate fluctuations, and political risk; can be used to securitize other forms of trade and nontrade finance from banks</li> </ul>          |
|  | Export credit guarantees   | <ul style="list-style-type: none"> <li>• Instruments to protect banks providing trade finance; facilitates the degree to which banks can offer trade finance products (for example, to SMEs without sufficient export track records)</li> </ul>               |

Source: Chauffour and Farole 2009.

Note: SMEs = small and medium enterprises.

The remainder of this overview offers a brief review of the content of this book and its 23 chapters and concludes with a number of key takeaways.

## **Section 1: Interfirm Trade Credit and Trade Finance during Crises**

With the collapse of major financial institutions, the global financial crisis first took the form of a major global liquidity crisis, including a trade finance crisis. Many banks reported major difficulties in supplying trade finance.

The conditions of access to interfirm trade credit also worsened in the aftermath of the crisis. Interfirm trade credit refers to finance provided to importers from exporters to buy the goods from overseas and to exporters to help them produce the goods to export as well as to allow them to finance their extensions of credit to importers. Interfirm trade credit is a particularly important source of short-term financing for firms around the world (Petersen and Rajan 1997), and it tends to be relatively more prevalent for firms in developing countries (Demirgüç-Kunt and Maksimovic 2001; Beck, Demirgüç-Kunt, and Maksimovic 2008). Although bank-intermediated trade finance and interfirm trade credit should be perfect substitutes in a world free of information asymmetries and the like, the two sources offer firms alternatives to deal with the frictions and market imperfections of the real world.

### ***Chapter 1: Trade Credit versus Bank Credit***

Inessa Love reviews the main rationale for the provision of trade credit by suppliers and highlights four main considerations that may lead firms to prefer interfirm trade credit when possible:

1. Trade credit suppliers have a cost advantage over banks in acquisition of information about the financial health of the buyers.
2. In the event of nonpayment, trade credit providers are better able than specialized financial institutions to liquidate the goods they repossess.
3. Trade credit serves as a guarantee for product quality.
4. Potential moral hazard problems on the borrower's side are reduced when trade credit is extended to suppliers because in-kind credit is difficult to divert to other uses.

Better understanding the determinants of interfirm trade credit is particularly important during financial crises, when the cost of trade finance increases and banks become more risk averse. Interfirm trade credit could play an important



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role and substitute for lack of liquidity in the financial system. Its use tends to increase in times of crisis (Calomiris, Himmelberg, and Wachtel 1995; Love, Preve, and Sarria-Allende 2007). Yet Inessa Love also points to evidence from the Asian financial crisis that interfirm trade credit and bank trade finance are imperfect substitutes and could complement each other (Love, Preve, and Sarria-Allende 2007). The findings suggest that trade credit cannot fully compensate for long-term contraction in bank finance that stems from a financial crisis. A contraction in trade credit may even exacerbate a contraction in bank finance, which in turn may lead to a collapse in trade credit.

### ***Chapter 2: Firms' Trade-Financing Decisions***

Assuming that firms' suppliers are better able than banks or other financial institutions to extract value from the liquidation of assets in default and have an information advantage over other creditors, Daniela Fabbri and Anna Maria C. Menichini then investigate the determinants of trade credit and its interactions with borrowing constraints.

They find that rationed and unrationed firms alike use trade credit to exploit the supplier's liquidation advantage. Moreover, they find that the use of trade credit goes together with the transfer of physical inputs within the supply chain and that the bias toward more physical inputs increases as financial constraints tighten and creditor protection weakens.

### ***Chapter 3: Interfirm Trade Finance: Pain or Blessing?***

Anna Maria C. Menichini identifies a number of theoretical economic rationales that could underpin policy actions in favor of trade credit financing in times of crisis, with a focus on constraints faced by developing countries. She looks at whether interfirm credit has features that can shield it from a general credit squeeze or whether, instead, it constitutes an additional element of tension.

She finds two main and opposing effects: Interfirm finance may be a way to overcome informational problems associated with standard lender-borrower relations due to information asymmetries and principal-agent problems. However, interfirm finance may also contribute to propagation of shocks among firms along the supply chain, especially for firms operating in developing countries with little access to alternative finance.

Menichini proposes a few policy schemes to help reduce contagion by focusing on the breaking points in the supply chain—mainly firms more exposed to the risk of insolvency and more likely to start the chain of defaults.

### *Chapter 4: Financial Crisis and Supply-Chain Financing*

The analysis of the link between interfirm trade credit and bank trade finance during the 2008–09 global crisis has been blurred by the fact that the financial crisis swiftly spilled over to the real economy and constrained firms' cash reserves and revenues, putting additional pressure on their capacity to extend trade credit. As such, both interfirm trade credit and bank trade finance dropped in the midst of the crisis.

To document the financial behavior of firms under competitive pressure, Leora Klapper and Douglas Randall use data from the World Bank's Financial Crisis Surveys of 1,686 firms in Bulgaria, Hungary, Latvia, Lithuania, Romania, and Turkey in 2007 and 2009. They find that in countries hit hardest by the crisis, firms under competitive pressure were relatively more likely to extend trade credit, suggesting an additional financial burden for some firms.

### **Section 2: The Role of Trade Finance in the 2008–09 Trade Collapse**

The 2008 financial crisis and the ensuing trade collapse immediately prompted policy makers and analysts to link the two events: Trade dropped in part because of a lack of supply of trade finance. Given the lack of data and the relative secure nature of trade finance, however, some analysts raised doubts about the prominent role of trade finance. A review of financial crises over the past three decades found that trade elasticity to gross domestic product has increased significantly over time, which in turn may explain why trade dipped so much (Freund 2009).

Survey data also suggest that the trade finance market tightened during the crisis but may not have played the alleged dominant role in the drop in trade. Lack of data spurred the IMF and BAFT-IFSA and the International Chamber of Commerce (ICC) to launch a series of commercial- and investment-bank surveys to gauge the impact of the financial crisis on trade finance availability and constraints.

The ICC surveys indicate that it became more difficult to raise money to finance trade in the aftermath of the Lehman Brothers collapse and that both the availability and the price of trade finance severed in late 2008. The surveys indicate that the supply of trade finance remained constrained both in value and in volume in 2008–09. They also find considerable evidence that the weaker emerging economies were hit first (for example, Bangladesh, Pakistan, and Vietnam), but fast-growing developing economies also suffered from the contraction in trade finance (ICC 2009, 2010).

***Chapter 5: Evidence from Commercial Bank Surveys***

Analyzing the IMF/BAFT-IFSA surveys of commercial banks, Irena Asmundson, Thomas Dorsey, Armine Khachatryan, Ioana Niculcea, and Mika Saito find evidence that credit limits on trade finance tightened during the crisis. However, they also find that increases in the price of trade finance products did not stand out from those for other commercial bank products.

Their results suggest that factors other than trade finance—chiefly the collapse of global demand and the decline in commodity prices—played a more important role in the 2008–09 trade collapse. Nevertheless, increased pricing and tightened credit conditions undoubtedly discouraged some trade transactions that might have taken place otherwise. These results have been corroborated by the World Bank’s surveys of firms, which chapter 10 covers in greater detail.

***Chapter 6: Global Perspectives on Trade Finance Decline***

Jesse Mora and William Powers examine broad measures of financing—including domestic lending in major developed economies and cross-border lending among more than 40 countries—and review eight survey-based results.

Their findings suggest that a decline in global trade finance had a moderate role, at most, in reducing global trade. Furthermore, in most cases, trade finance declined much less sharply than exports and broader measures of financing. Empirical firm-based data analyses confirm the importance of the demand side effect. They also observed a compositional shift in trade financing as heightened uncertainty and increased counterparty risk led exporters to move away from risky open accounts and toward lower-risk letters of credit and export credit insurance.

***Chapter 7: A Skeptic’s View of the Trade Finance Role***

Using highly disaggregated international trade data for the United States, Andrei A. Levchenko, Logan T. Lewis, and Linda L. Tesar examine whether financial variables can explain the cross-sectoral variation in how much U.S. imports or exports fell during the crisis. Overall, they find little evidence that financial factors played a role in the collapse of U.S. trade at the aggregate level, in sharp contrast to other measures that were found to matter significantly in earlier studies, such as vertical production linkages and the role of durables. Their results might point out that when aggregating across partner countries up to the sector level, the effect disappears.

Moreover, the authors recognize that although the United States is widely seen as the epicenter of the financial crisis, its financial system is nonetheless one of the deepest and most resilient in the world. Thus, even if their analysis finds no effect

of financial factors for U.S. trade, these factors may be much more important in other countries with weaker financial systems.

### ***Chapter 8: Trade Finance in Africa***

Although trade finance constraints may not have constrained advanced economies' exporters and importers, developing-country policy makers were concerned about the impact of exports from low-income countries—particularly from African countries. John Humphrey, through firm interviews, looks at the impact of the financial crisis on African exporters.

He reports that most interviewed firms in Africa did not experience direct difficulties with trade finance. Yet, indirectly, the financial crisis—through its effects on global demand and price volatility—led to deterioration of firms' creditworthiness and a decline in their access to trade finance. Moreover, the survey underscores the differentiated impact the crisis may have had by firm type: Scarce bank finance reportedly was channeled mainly to firms with established exporting records and regular customer relations, leaving small and medium enterprises (SMEs) and new entrants that lacked relationships with banks and customers in a dire situation.

### ***Chapter 9: Financial Crises and African Trade***

Nicolas Berman and Philippe Martin also focus their analysis on the impact of the crisis on Sub-Saharan Africa. The authors find that African exporters are more vulnerable to a financial crisis in importing countries given the concentration of African exports in primary goods as well as the high dependence of African exports on trade finance.

Nonetheless, they also find that the direct effects of the crisis may have been weaker because of the relative insulation and underdevelopment of the financial system in most Sub-Saharan African countries, and that the indirect effect through trade may be stronger. During a financial crisis—when uncertainty and risk are high, and trust and liquidity are low—banks and firms in importing countries tend to first cut exposure and credit to countries that they perceive as financially riskier.

### ***Chapter 10: The World Bank's Firm and Bank Surveys in Developing Countries***

Mariem Malouche reaches similar conclusions in her report on a larger-scale firm survey commissioned by the World Bank in 14 developing countries. As of

April 2009, the low-income African countries where the survey was conducted (Ghana, Kenya, and Sierra Leone) seem to have been relatively insulated from the financial crisis. Yet the crisis did add strains on their underdeveloped domestic financial systems and adversely affected SMEs and new export firms that are seeking to diversify away from commodity exports. The firm surveys also indicated that the crisis generally affected SMEs more than large firms across regions and income levels because of a weaker capital base and bargaining power in relation to global buyers as well as banks.

SMEs also have been subject to relatively higher increases in the cost of trade finance instruments. Many SMEs operating in global supply chains or in the sectors most affected by the global recession (such as the auto industry) have been constrained through both the banking system and the drop in export revenues and buyers' liquidity. Moreover, SMEs have been more likely constrained to purchase guarantees and insurance to access trade finance. However, echoing previous survey results, most SMEs declared that, overall, their exports were severely or moderately constrained by the financial crisis, mainly because of lack of orders and directly related lack of finance on buyers' part (trade credit). Lack of finance from banks seems to have played a lesser constraining role.

### ***Chapter 11: Private Trade Credit Insurers: The Invisible Banks***

Koen J. M. van der Veer examines the role of trade finance guarantees and insurance during the crisis and estimates to what extent the reduction in the availability of trade credit insurance has affected trade.

Using a unique bilateral data set that covers the value of insured exports, premium income, and paid claims of one of the world's leading private credit insurers during 1992–2006, he finds that, on average, every euro of insured exports generates 2.3 euros of total exports. Van der Veer further estimates that, during the 2008–09 crisis, up to 9 percent of the drop in world exports and up to 20 percent of the drop in European exports could be explained by a combination of decreases in private trade-credit insurance limits and increases in insurance premiums.

### ***Chapter 12: Trade Finance in Postcrisis Recovery of Trade Relations***

Looking forward, Cosimo Beverelli, Madina Kukenova, and Nadia Rocha discuss the speed of trade recovery after a banking crisis. Using an annual data set of product-level exports to the United States from 157 countries from 1996 through 2009, they estimate the duration of each export relationship and find that, on average, 23 percent of trade relationships were interrupted by a banking crisis between 1996 and 2008.

The authors also find that trade is likely to recover faster with “experience,” defined as the number of years an export relationship had been active before a banking crisis hit. Moreover, trade finance, measured by firms’ financial dependence, does not appear to affect the recovery of trade relations after a banking crisis. These findings corroborate earlier results that small and relatively inexperienced firms are likely to be the most vulnerable to banking crises, and they also indicate that these firms will have more difficulty surviving crises and recovering.

### **Section 3: Government Trade Finance Intervention during Crises**

Notwithstanding uncertainty about the size of the trade finance gap and its potential role in the drop in trade, governments around the world were compelled in the fall of 2008 to intervene to mitigate the impact of the crisis on their domestic economies. The exceptional character of the crisis called for immediate actions:

- U.S. and European governments with fiscal capacity instituted bailout programs for their financial sectors.
- Governments in developing countries and emerging economies instituted expansionary fiscal and monetary policies.
- International institutions rapidly scaled up their trade finance programs and lending to budget-constrained countries.

As is often the case when governments intervene to correct supposed market distortions, some policy analysts wondered how to make such interventions the most effective and the least distortionary.

#### ***Chapter 13: The Theoretical Case for Trade Finance Intervention***

On a theoretical level, Tore Ellingsen and Jonas Vlachos argue in favor of trade finance intervention during a liquidity crisis because it mitigates the problems that arise—particularly for international finance—when firms hoard cash. Because international loan enforcement is weaker than domestic enforcement, sellers are less willing to keep international loans on their books, and it is the seller’s insistence on immediate payment that creates the demand for liquidity in the first place.

The authors also contend that multilateral organizations should support trade finance specifically, rather than providing funding more broadly, because domestic policy initiatives are likely to place a relatively low weight on foreigners’ gains.

Because the support of trade finance typically involves supplying funds to the buyer's bank, while primarily benefiting the seller, it is easy to see how these transactions will suffer under purely domestic policies.

***Chapter 14: Risks in Boosting the Availability of Trade Finance***

In contrast, Jean-Jacques Hallaert argues against boosting the availability of trade finance. First, like other analysts, he argues that trade finance is unlikely to have contributed significantly to the plunge in international trade in the 2008–09 crisis. The cost of trade finance was a greater problem than its availability. Rather than trying to increase the supply of trade finance per se, policy makers should help credit flows in general to return to normal.

Second, Hallaert contends that boosting the supply of trade finance is risky and probably not the best use of scarce public resources. Moreover, encouraging export credit agencies (ECAs) to take more risks could result in fiscal contingent liabilities.

***Chapter 15: Trade Finance during Crises—Market Adjustment or Market Failure?***

For Jean-Pierre Chauffour and Thomas Farole, a critical question is therefore whether the supply of trade finance declined because of market or government failures, and, hence, whether there is a rationale for public intervention to address such failures. Two broad cases that would create a real trade finance gap would be (a) insufficient supply (“missing markets”) or (b) supply at prices temporarily too high to meet demand (“overshooting markets”)—both of which may have had temporary relevance in fall 2008.

Drawing upon the lessons from past crises, Chauffour and Farole devise a set of 10 principles for effective public actions in support of trade finance:

1. Targeting interventions to address specific failures
2. Ensuring a holistic response that addresses the wider liquidity issues of banks
3. Channeling the response through existing mechanisms and institutions
4. Ensuring collective action in the response across countries and regions
5. Addressing both risk and liquidity issues
6. Recognizing the importance of banks in developed countries to free up trade finance for emerging-market exporters
7. Promoting greater use of interfirm credit and products such as factoring
8. Maintaining a level playing field in terms of risk weight

9. Improving transparency in the trade finance market
10. Avoiding moral hazard and crowding out commercial banks by setting clear time limits and exit strategies for intervention programs and by sharing rather than fully underwriting risk.

### ***Chapter 16: Export Credit Agencies in Developing Countries***

Jean-Pierre Chauffour, Christian Saborowski, and Ahmet I. Soylemezoglu assess the case for policy makers to support setting up ECAs in response to financial crises—focusing in particular on low-income economies, which often suffer from sovereign debt problems, weak institutional capacity, poor governance practices, and difficulties in applying the rule of law.

Although expansion of ECA operations can mitigate credit risk and keep trade finance markets from drying up, they argue that a developing country should establish an ECA only after careful evaluation of its potential impact on both the financial and the real sectors of the economy. The authors advise extreme caution in setting up ECAs in low-income contexts and highlight the factors that policy makers should consider.

### **Section 4: Institutional and Regulatory Support for Trade Finance**

In response to the financial crisis, many governments put in place programs that either injected liquidity in banks or provided fiscal and monetary stimulus to the economy, sometimes directly in support of affected exporting firms. Central banks with large foreign exchange reserves could supply foreign currency to local banks and importers, generally through repurchase agreements. And government intervention was not reserved to developed countries. The central banks of Argentina, Brazil, India, Indonesia, the Republic of Korea, and South Africa, to name a few, also massively supported their local banks.

The measures helped mitigate the global decline in output and trade flows and directly and indirectly supported the provision of trade finance—stimulating more confidence in the outlook of individual countries, reducing risk premiums, and providing more direct financing to financial institutions. However, many developing countries were not in a position to extend credit or expand existing trade finance facilities and therefore needed support.

While economists and other experts argued about the suitability of intervening or not intervening, policy makers and development institutions were facing a historic trade collapse and felt the pressure to act swiftly. A look back at their actions indicates that the 10 principles described above were largely followed. The response



of international financial institutions was immediate and of a magnitude unseen in recent history. In particular, multinational and regional development banks mostly scaled up existing instruments and acted in cooperation with other trade finance institutions. Capacities in certain activities were enhanced significantly as early as fall 2008. As soon as the world economy and trade flows showed signs of picking up, governments began to withdraw the support measures put in place at the peak of the crisis.

The expansion of trade finance programs notwithstanding, another important concern has been the possible adverse effect of the new banking regulations under Basel II and Basel III on the provision of trade finance. In the immediate aftermath of the crisis, the World Trade Organization (WTO), the ICC, BAFT-IFSA, a number of private banks, and others sought to draw attention to (a) the preferential regulatory treatment of trade finance under the Basel I framework, in recognition of its safe, mostly short-term, and self-liquidating character, and (b) their concerns that the implementation of some Basel II provisions had proved difficult for trade. At the 2009 G-20 summit in London, flexibility in the application of these provisions was explicitly requested. Moreover, the WTO and the banking sector argue that Basel II and proposed Basel III rules, as they apply to trade finance, may significantly affect banks' ability to provide trade finance at affordable prices to businesses, to increase trade pricing, and to reduce trade finance capacity and world trade, especially in the direction of poor countries.

### ***Chapter 17: World Trade Organization Response***

Marc Auboin rationalizes the government actions in support of trade finance because of the potential damage to the real economy from shrinking trade finance. International supply-chain arrangements globalized not only production, but also trade finance. Sophisticated supply-chain financing operations—including those for SMEs—rely on a high level of trust and confidence in global suppliers that they will deliver their share of the value added and have the necessary financial means to produce and export it in a timely manner. Any disruption in the financial sector's ability to provide working capital or preshipment export finance, to issue or endorse letters of credit, or to deliver export credit insurance could create a gap in complex, outward-processing assembly operations and lead by itself to a contraction in trade and output.

As such, Auboin underlines the institutional and economic case for the WTO to be concerned and involved in trade finance. He also stresses the importance of cooperation, arguing that one clear lesson from the Asian financial crisis is that—in periods prone to lack of trust and transparency as well as to herd behavior—all actors, including private banks, ECAs, and regional development banks, should

pool their resources to the extent practicable. Cooperation among players is particularly important in the absence of a comprehensive and continuous data set on trade finance flows.

### ***Chapter 18: World Bank Group's Response***

As Bonnie Galat and Hyung Ahn recount, the World Bank Group, through the International Finance Corporation (IFC), was quick to act—strengthening its trade facilitation programs between November 2008 and April 2009. The IFC Global Trade Finance Program (GTFP) doubled its revolving ceiling to \$3 billion in late 2008 in support of emerging markets' trade finance.

Leveraging the experience gained from the GTFP, the IFC launched the Global Trade Liquidity Program (GTLP) in July 2009 to rapidly mobilize and channel funding to support underserved developing-country markets by providing trade credit lines and refinancing portfolios of trade assets held by selected banks. Additionally, the new program was premised on leveraging the IFC funding by creating a historic collaboration with other international financial institutions, which also contributed their financial resources to the GTLP. Both programs have successfully facilitated trade during the crisis period. As the world economy recovers from the crisis, the IFC will bring the GTLP to an end, starting in 2012.

### ***Chapter 19: Regional Development Banks' Response***

Rudolf Putz, Ghazi Ben Ahmed, Steven Beck, and Daniela Carrera describe the impact of the financial crisis on regional trade and trade finance as well as the way four regional development banks quickly responded by scaling up their trade finance facilities.

The European Bank for Reconstruction and Development increased the overall program limit of its Trade Facilitation Program from €800 million to €1.5 billion. The Asian Development Bank ramped up the activities of its Trade Finance Program to support \$2 billion in trade in 2009, an increase of more than 300 percent over 2008. Further enhancements of these programs were agreed on at the G-20 summits, in particular the already-noted IFC's establishment of a liquidity pool allowing cofinancing operations with banks in developing countries. From this perspective, the African Development Bank established a \$1 billion Trade Finance Initiative in January 2009 as part of its broader package of crisis response initiatives.

For its part, the Inter-American Development Bank (IDB) had already put in place its Trade Finance Reactivation Program (TFRP) when the crisis hit. The TFRP supported the IDB's fast response in Latin America and the Caribbean, strengthening supply-side capacity and trade-related infrastructure. In addition,

the Trade Finance Facilitation Program (TFFP), implemented in 2005, proved an effective fast-delivery vehicle for not only mitigating the effects of the liquidity crisis, but also expanding trade finance for financial intermediaries and their clients.

### ***Chapter 20: Berne Union Response***

The Berne Union (BU)—the leading global association for export credit and investment insurance—counts the major private credit insurers as well as most ECAs worldwide among its members. As Fabrice Morel explains, ECAs stepped in during the 2008–09 financial crisis to provide programs for short-term lending of working capital and credit guarantees aimed at SMEs.

For certain countries, the BU commitment was substantial (for example, in Germany and Japan). In some countries, large lines of credit were granted to secure supplies with key trading partners (for example, in the U.S. relationships with China and Korea), while in some other countries, cooperation centered on support for regional trade (in particular, supply-chain operations).

### ***Chapter 21: International Chamber of Commerce Response***

Over the past three years, the ICC developed intelligence gathering initiatives in trade finance to promote a banking model that would continue to finance a sustained expansion of international trade, even in difficult times. Thierry J. Senechal illustrates how the ICC addressed the lack of reliable information in trade finance.

He reviews measures undertaken by ICC in the midst of the financial crisis, then discusses the market intelligence projects developed by the ICC Banking Commission—in particular, the Global Surveys on Trade and Finance designed to gain an accurate snapshot of the prevailing market trends and to gauge future expectations for global trade and traditional trade finance. Senechal also discusses key findings of the ICC research contained in the Trade Finance Register, including the initial finding from a first set of data that trade finance is a relatively low-risk asset class (ICC 2011), and concludes by discussing future patterns of international cooperation and the need to establish a new set of regulations to supervise banks.

### ***Chapter 22: Private Bankers' Response***

Donna K. Alexander of BAFT-IFSA and representatives of three global banks—Tan Kah Chye (Standard Chartered Bank), Adnan Ghani (Royal Bank of Scotland), and Jean-François Lambert (HSBC)—describe their experience from the ground

at the climax of the crisis and the bankers' efforts to maintain their trade finance credit lines throughout the crisis.

Although the trade finance market has largely recovered from its trough in late 2008, the authors are also adamant that implementation of the Basel III recommendations by the Basel Committee on Banking Supervision (BCBS) could result in decreased trade flows for trade-focused banks at a time when those flows are essential to supporting global economic recovery. They argue that the new prudential liquidity and capital requirements may result in an increase in the cost of lending across the board but would disproportionately affect trade finance. In their view, trade finance exposures are small in size, self-liquidating, and transactional in nature. They also tend to be short term (often 180 days or less) and more geographically diversified. Finally, they note that trade exposures historically have had low default rates and, even in default scenarios, have had better and quicker recoveries than other asset classes because clients tend to repay working capital first to keep their cash-flow engines running.

In the view of bank regulators and others, the changes in the Basel rules aim to achieve a sounder banking sector and to establish more risk-sensitive means for calculating risk weights for various obligors. In response to these concerns, the BCBS conducted a comprehensive quantitative impact study to assess the impact of capital adequacy standards announced in July 2009 and the Basel III capital and liquidity proposals published in December 2009. As a result, the BCBS maintained the proposed capital and liquidity standards, which it claims will help strengthen the regulatory environment by gradually raising the level of high-quality capital in the banking system, increasing liquidity buffers, and reducing unstable funding structures. Although under Basel III the risk-based capital required to be held against all credit exposures will be higher—because of both the higher capital ratios and the increased emphasis on equity capital—the increase in capital for trade finance exposures is not any greater than for other exposures. In December 2010, the BCBS issued the Basel III rules text previously endorsed by the G-20 at its November 2010 summit in Seoul.

### ***Chapter 23: Trade Finance Issues under the Current Basel Regulatory Framework***

Marc Auboin expresses hope that the regulatory debate will remain open and will lead to a better understanding of both bankers' and regulators' views, ultimately resulting in a set of regulations perceived as right and fair. Data collection and further analysis of the impact of the new rules are necessary.

The ICC has contributed to this debate by focusing its efforts on addressing the lack of reliable information in trade finance and mobilizing resources to engage in

a constructive dialogue with regulators to bridge the information gap. This kind of coordination would assist in developing user-friendly intelligence for both the public and the private sectors.

The WTO and the World Bank have recommended that the G-20 examine the potential impact of the Basel II and III provisions on the availability of trade finance—with a particular focus on developing-countries' trade—and take stock of such examination at the 2011 G-20 summit in Cannes, France.

### **Main Takeaways from the Crisis**

1. *Lack of trade finance data is impeding the formulation of policies.* The absence of data capturing all kinds of trade finance (bank-intermediated and inter-firm) has proven a major constraint to measuring the extent of the trade finance shortfall and its effect on trade flows during the financial crisis. The ICC's buildup of the Trade Finance Register is a significant step forward because it will create a living database of the trade finance market and may help demonstrate the resilience of the trade finance business.
2. *Trade finance matters for trade.* Results from bank and firm surveys undertaken during the crisis to overcome the lack of trade finance data, as well as postcrisis empirical analyses, all indicate tighter trade finance conditions during the crisis and significant adverse effects on trade flows.
3. *Not all forms of trade finance are equal.* Although the crisis constrained both bank-intermediated trade finance and interfirm trade credit, empirical findings suggest that interfirm trade credit may be more resilient than bank-intermediated trade finance in times of crisis. Trade credit offers features that make it safer, given the better information that buyers and suppliers have on creditworthiness of clients and the liquidating feature of trade credit. Although trade credit (in particular, among supply chains) could be a factor of contagion leading to sharp drops in trade during crises, it also contributes to a quicker rebound when economies recover—a pattern observed in Southeast Asia during the crisis.
4. *Trade finance was not the main driver behind the 2008 trade collapse.* The shortfall in trade finance seems to have been a moderate factor in the sharp 2008–09 drop in trade flows. Trade finance and trade volumes dropped mostly as a result of the spillover of the financial crisis to the real economy, including through lower activity and destocking. The demand effect was further amplified for firms operating in global supply chains or in sectors that were most affected by the slow global economy, such as the auto industry.
5. *SMEs have been particularly vulnerable to the tightening of trade finance conditions.* The lack of access to affordable trade finance has been particularly

detrimental for certain firms (for example, SMEs and new exporters), especially in developing countries with underdeveloped financial systems and weak contractual enforcement systems. SMEs have been more affected than large firms because of a weaker capital base and bargaining power in relation to global buyers and banks. Also, SMEs have been more subject to high increases in the cost of trade finance instruments, with banks being more risk averse and preferring to work with sounder large, multinational firms.

6. *New Basel regulations may have unnecessarily constrained trade finance supply during the crisis and in the postcrisis environment.* Bankers and some international institutions consider Basel II regulations to have further constrained the supply of trade finance during the crisis, especially for banks based in low-income countries (as well as second- and third-tier banks in middle-income countries). They have called on regulators to carefully study the potential unforeseen impact of proposed Basel III changes on trade finance. In particular, banks argue that the increase in the new liquidity and capital prudential requirements and the nonrecognition of trade assets as highly liquid and safe would lead to a significant increase in the cost of banks providing trade finance, which in turn will lead to a lower supply, higher prices, or both. Conversely, regulators have maintained the view that, under Basel II and III, the increase in capital for trade finance exposures is not any greater than for other exposures. The new leverage ratio and the new liquidity rules will not have any systematic impact on trade finance, though they may affect a few large, complex, or wholesale-funded banks, albeit for reasons unrelated to their trade finance activities. Even in those cases, the impact on trade finance is not expected to be greater than on any other class of asset. Given the diverging views, the BCBS has established a working group to study impacts of regulation on trade finance, and—at the request of the World Bank and the WTO—the G-20 will take stock of the situation at its 2011 meeting.
7. *The international community responded swiftly to the trade finance crisis.* The G-20 orchestrated quick and collective actions from governments and the international financial community. This led to a set of cofinancing arrangements among development banks, export credit agencies, foreign commercial banks, private insurance underwriters, and investment funds. While part of the G-20 support was directed mostly at a handful of large banks and international banking groups, the support of the IFC and regional development banks—in terms of both insurance and liquidity—has targeted mainly smaller banks and banks in developing countries.
8. *A timely exit from trade finance support programs is key.* As the global economy recovers and demand rises, some governments appropriately cut back their trade finance programs to avoid displacing legitimate private sector activity.

Similarly, the IFC will wind up the GTLP, set up in response to the crisis, beginning in 2012. Setting clear time limits and exit strategies for intervention programs and sharing, rather than fully underwriting, risk are important considerations to limit moral hazard and the crowding out of commercial banks in times of financial crises.

9. *Maintaining specific programs in support of vulnerable segments of the trade finance market is also key.* Continued uncertainty in some markets (for example, low-income countries with underdeveloped financial systems and weak contractual enforcement) or among some firms (for example, SMEs and new exporters) calls for vigilance on the suitability and timing of the retrenchment of international organizations' trade finance programs. Although lack of liquidity does not seem to be the most prominent constraint anymore, the director-general of the WTO and the president of the World Bank, with the support of the heads of regional development banks, have flagged the risk that a substantial number of countries could be increasingly left out of trade finance markets and thereby unable to benefit fully from the recovery of global trade. At the Seoul G-20 meeting of November 2010, the international community expressed particular concern about low-income countries that may still be facing severe difficulties in accessing trade finance at affordable cost, particularly in import finance.
10. Finally, *an important knowledge gap remains* on the effect of trade finance on trade and the role of trade finance during crises, as well as on the appropriate banking regulations and supervisory standards for banks' trade finance portfolio exposure. This calls for a continuing analysis of the issues by academics, practitioners, and other interested stakeholders.

## Notes

1. Although this range of 80–90 percent was widely reported, the source and evidence for the claim remain unclear.

2. Estimates from FIMetrix (IMF-BAFT 2009) suggest that 10–20 percent of trade finance is composed of cash-in-advance payments (these mainly involve small and medium enterprise [SME] buyers, inordinately in developing countries); 45–80 percent is on open account (of which 30–40 percent is intrafirm); and 10–35 percent is bank-intermediated.

3. This is, of course, not true in all cases. Specific problems occur with products that are perishable (whose value erodes quickly or immediately) or extremely differentiated (where there is little or no market value outside the intended buyer) as well as with services (which generally cannot be collateralized).

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